



Lake Erie Harmful Algal Bloom Bulletin

06 September, 2018, Bulletin 23

Analysis

The *Microcystis* cyanobacteria bloom continues in the western basin of Lake Erie. Recent satellite imagery (9/5) shows the bloom extending north along the Michigan coast to Point Mouillee State Game Area, east along the Ohio coast to the Toussaint River, and through the Bass Islands extending up to 17 miles east of Pelee Island. Calm winds observed this week (9/3-5) may have promoted scum formation of *Microcystis* concentrations. Toxin concentrations were detected at all sampling sites but remain below the recreational threshold. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

Forecasts

Winds (10-25 kn) forecast today through Monday (9/6-10) will promote mixing of surface waters and the southward transport of *Microcystis* concentrations today through Sunday (9/6-9). --Davis, Lalime

Additional Resources

To find a safe place for recreation, visit the Ohio DOH "BeachGuard" site: <http://publicapps.odh.ohio.gov/beachguardpublic/>

Ohio EPA's site on harmful algal blooms: <http://epa.ohio.gov/HAB-Algae>

NOAA's GLERL provides additional HAB data here: http://www.glerl.noaa.gov/res/HABs_and_Hypoxia

The images below are "GeoPDF". Please visit <https://go.usa.gov/xReTC> for instructions on viewing longitude and latitude.

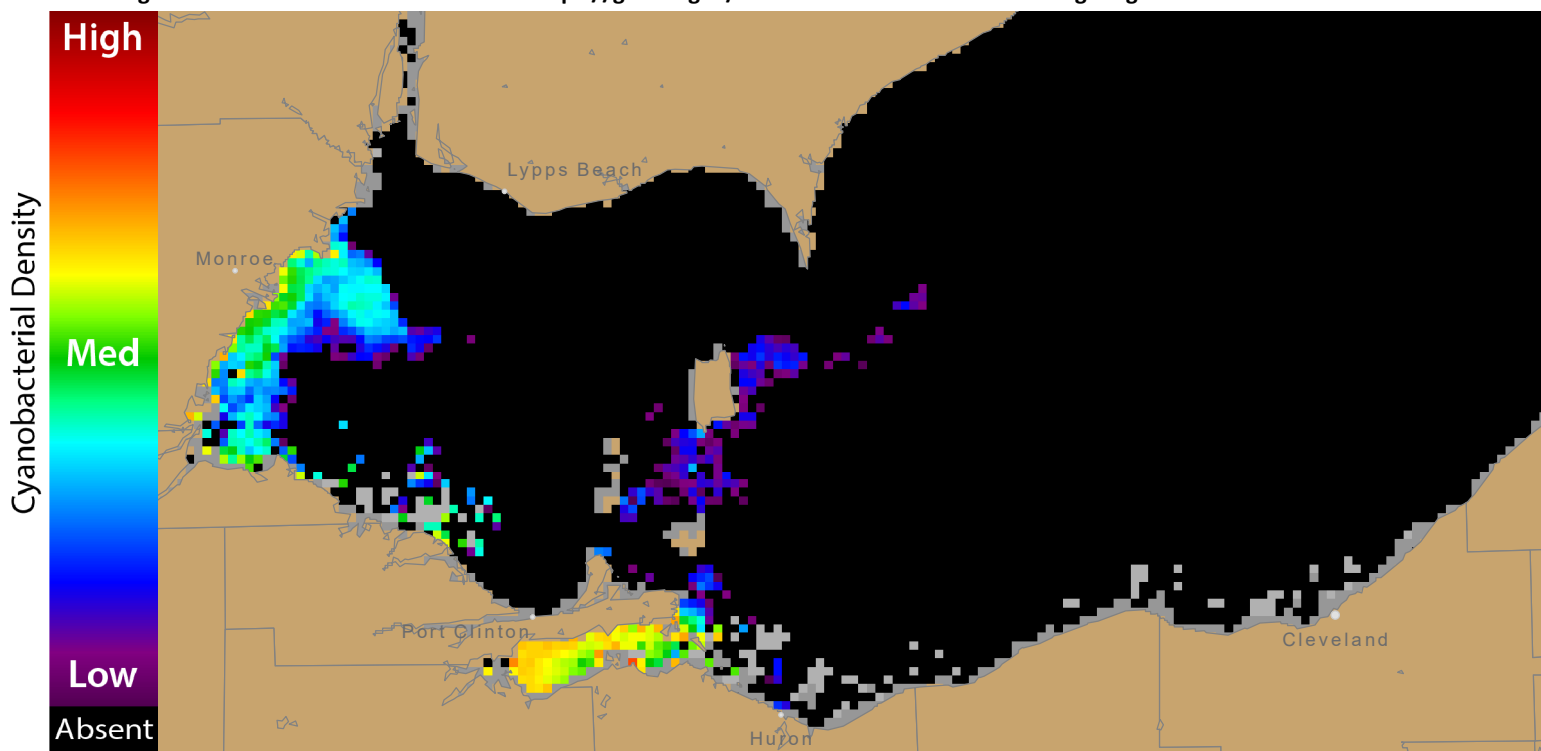


Figure 1. Cyanobacterial Index from NASA MODIS-Terra data collected 05 September, 2018 at 12:33 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

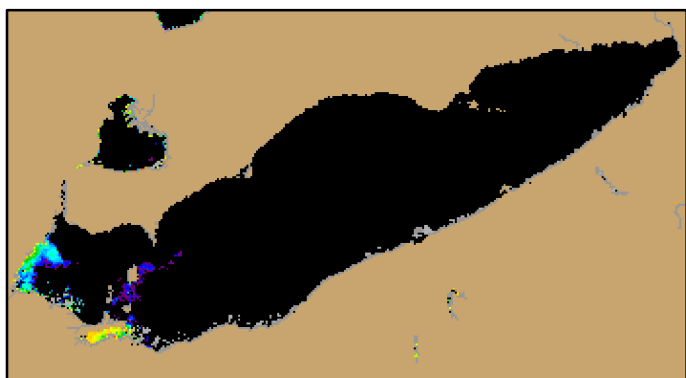
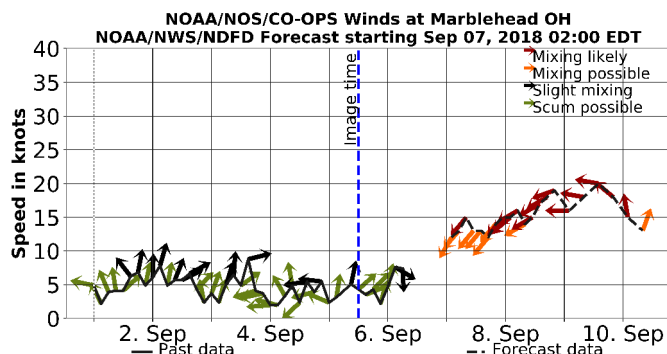


Figure 2. Cyanobacterial Index from NASA MODIS-Terra data collected 05 September, 2018 at 12:33.



Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

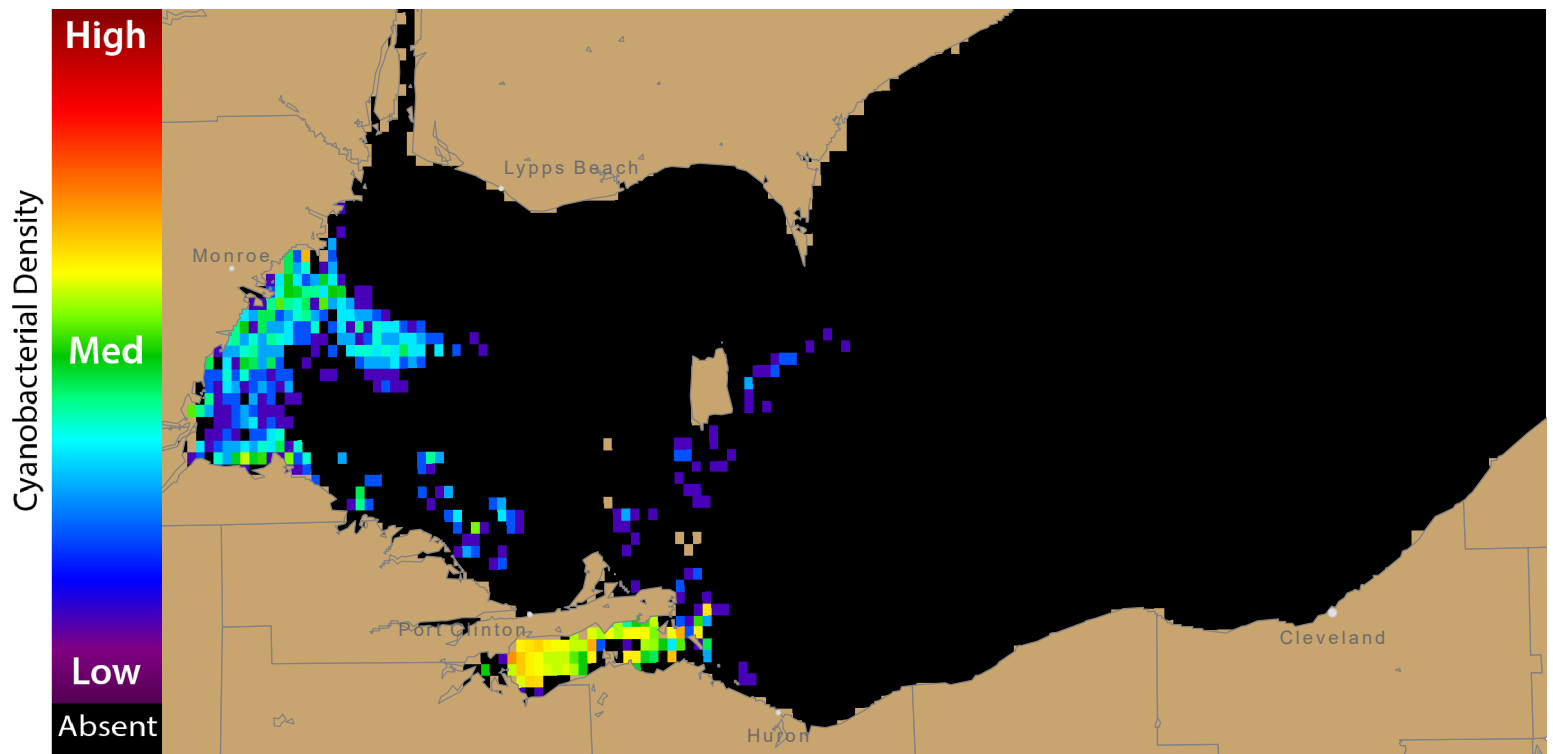


Figure 3. Nowcast position of bloom for 06 September, 2018 using LEOFS modelled currents to move the bloom from the 05 September,

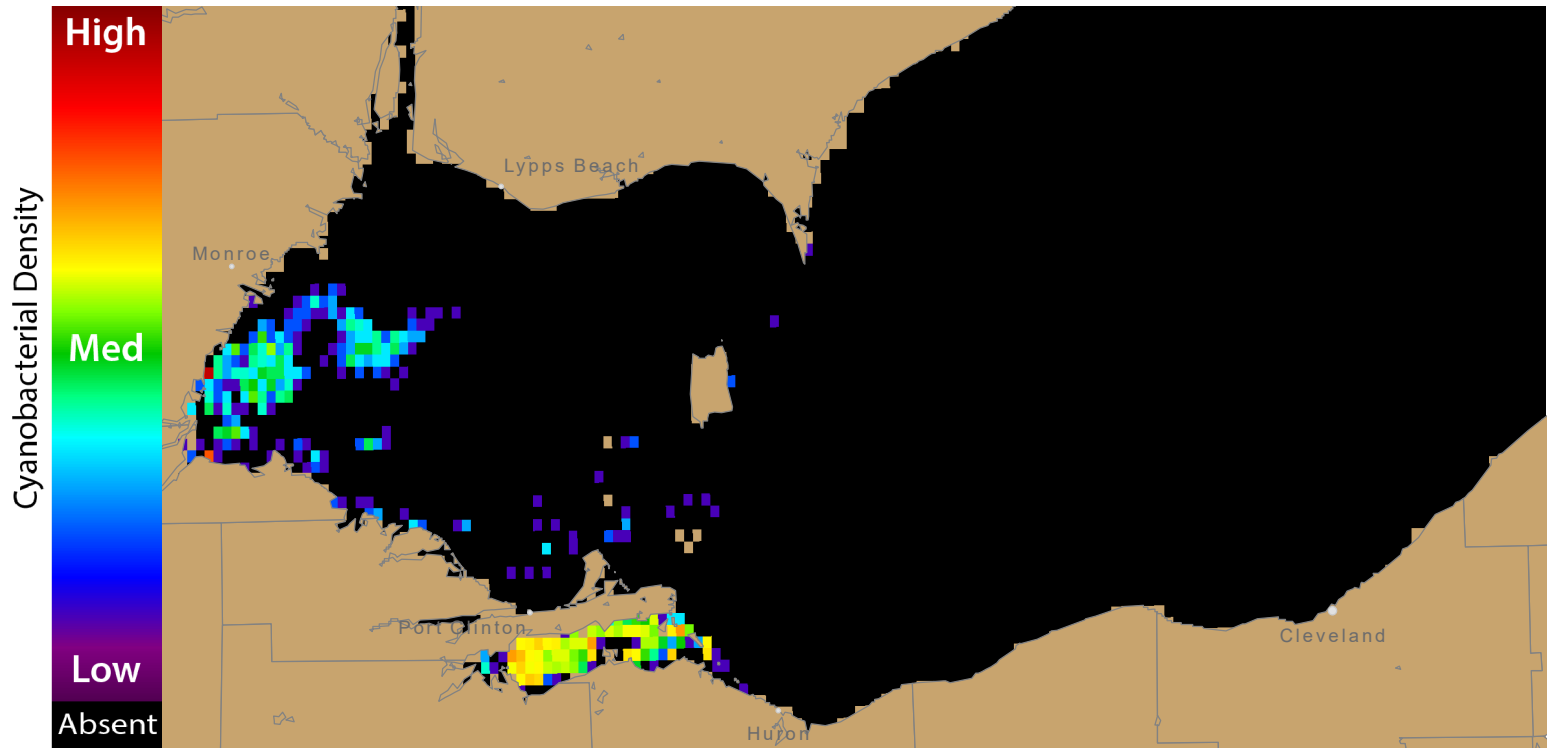
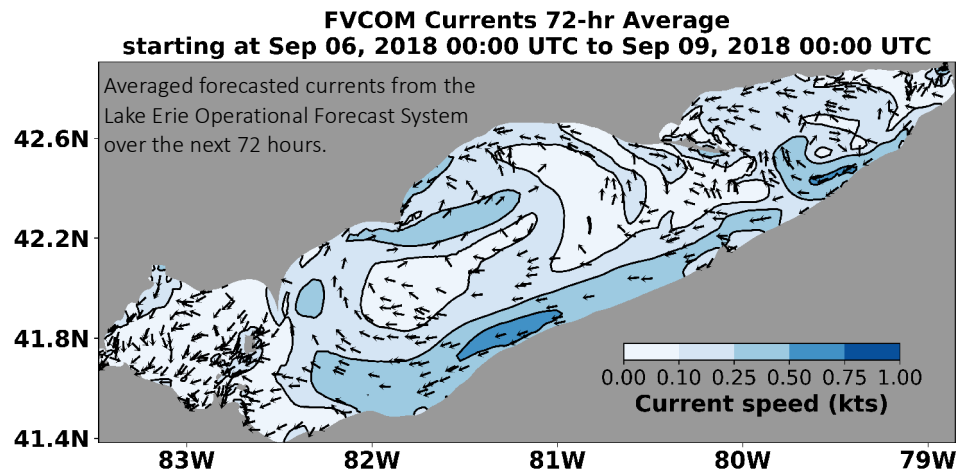


Figure 4. Forecast position of bloom for 09 September, 2018 using LEOFS modelled currents to move the bloom from the 05 September,



For more information and to subscribe, please visit the NOAA HAB Forecast page:
<https://tidesandcurrents.noaa.gov/hab/lakeerie.html>